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DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to a disk unit and relates to the disk unit which prevents the disk cartridge at the time of insertion and ejection of the disk cartridge which built in the disk in detail, and breakage of equipment.

[0002]

[Description of the Prior Art] In the conventional disk unit, a slot in method, tray-loading, etc. are used by making the cartridges (for example, mini disc etc.) which built in the disk into insertion and the method to take out.

[0003]

[Problem(s) to be Solved by the Invention] However, in the method mentioned above, in case a disk cartridge is inserted in a disk unit, it is easy to cause insertion mistake of the equipment using a slot in method having narrow insertion opening of slot in, for example, inserting a front flesh side conversely etc. Moreover, even when tray-loading was used, the tray had [ order / a front flesh side or ] the fault of being easy to lay conversely in the disk cartridge.

[0004] Therefore, this invention is made in order to cancel the above faults, breakage of the disk cartridge by incorrect insertion of a disk cartridge is prevented, and it aims at offering the disk unit which also prevents breakage of equipment further.

[0005]

[Means for Solving the Problem] It is characterized by this invention protruding the guide heights which engage with the crevice for a guide which established the disk cartridge and the stowage which fits in in said tray, and was established in the necessary location in said stowage at the rear face of a disk cartridge while preparing the proper place of the tray for conveyance of the disk cartridge which built in the disk notching for disk cartridge fetch, in order to attain said purpose.

[0006] Moreover, heights are protruded on the case proper place of said disk unit, the slot which engages with this is established in the necessary location of a tray, and it is characterized by constituting so that it may prevent incorrect-inserting a disk cartridge into a case.

[0007]

[Function] Since the stowage of a disk cartridge and the configuration which fits in is established in the tray of this invention, disk cartridge order cannot be made reverse and cannot be laid. Moreover, since guide heights are protruded in said stowage, the front flesh side of a disk cartridge is made reverse, and it is not laid.

[0008] Furthermore, since the slot for incorrect insertion prevention is established in said tray, the heights for incorrect insertion prevention are protruded on the case of equipment and a disk cartridge contacts the heights for incorrect insertion prevention which protruded on the case when it is going to contain a tray in the body of equipment, where the front flesh side of a disk cartridge is conversely laid in a stowage, incorrect insertion of a disk cartridge can be prevented and breakage of a disk cartridge and equipment can be prevented.

[0009]

[Example] The example of this invention is explained to a detail using 54 or less and a drawing.

Drawing 1 is the approximate account Fig. having shown the condition that the tray 2 projected from the case 1 of a disk unit, in the example of this invention, and drawing 2 is the rear-face top view of the disk cartridge (for example, mini disc) 3 which built in the disk.

[0010] First, a configuration is explained. Order and a front flesh side are distinguishable from a configuration by the configurations of a disk cartridge 3 differing in order, both the corners of anterior part being roundish like 3d, and both hind corners' becoming right-angled like 3e, and preparing crevice 3a for a guide in the rear face. In addition, 3f is the shutter section prepared in the disk cartridge 3.

[0011] The tray 2 formed the stowage 4 which lays a disk cartridge 3 in a center section mostly, and has formed the rim section 5 which has predetermined thickness in the periphery of a tray 2. The inside of the rim section 5 is formed in the configuration which fits into a disk cartridge 3. moreover, the stowage 4 of a tray 2 consists of opening 7 the support plate 6 formed in the pars basilaris ossis occipitalis, and for record/playback, and a support plate 6 is formed in the \*\*\*\* right-and-left both sides of a stowage 4 - - having -- the opening 7 for record/playback -- a stowage 4 -- it is mostly prepared in the center.

Moreover, the guide heights 8 protrude on each case 1 side of a support plate 6, and these guide heights 8 are formed in the configuration which engages with crevice 3a for a guide of the rear face of a disk cartridge 3. In addition, \*\*\*\*\* [ the number of the above-mentioned guide heights 8 / one ].

[0012] In the top center section of the tray receipt opening 9 of case 1 front face, the heights 10 for preventing incorrect insertion of a disk cartridge 3 protrude downward [ perpendicular ]. Moreover, the slot 11 for incorrect insertion prevention is established in the case 1 side center section of the rim section 5 of a tray 2, and the slot 12 for receipt is established in the near-side center section of the rim section 5 of a tray 2. And the slot 11 and the slot 12 for receipt for incorrect insertion prevention are formed in the configuration which engages with the heights 10 of the receipt opening 9 of a case 1, respectively.

Moreover, the notching 13 for fetch of a disk cartridge 3 is formed in the right-and-left both ends of the rim section 5. In addition, the manual operation button group by which 14 was prepared in the disk unit, and 15 are displays, such as LCD.

[0013] Next, an operation of \*\*\*\*\* constituted as mentioned above is explained. Lengthen a tray 2, it is made to come out to the protrusion location shown in drawing 1 , and a disk cartridge 3 is laid in the stowage 4 of a tray 2. At this time, it can lay in a stowage 4 in the normal condition, without mistaking the sense of order by laying a disk cartridge 3 so that the inside configuration and disk cartridge 3 of the rim section 5 of a tray 2 may fit in.

[0014] However, since the guide heights 8 are formed on the support plate 6 when the front flesh side of a disk cartridge 3 is accidentally made reverse and it lays in a stowage 4, as shown in drawing 3 , The knowledge of making a mistake in and laying the front flesh side of a disk cartridge 3 can be carried out by the guide heights 8 and surface 3b of a disk cartridge 3 contacting, and projecting more nearly up than the slot 11 for incorrect insertion prevention where edge 3c of a disk cartridge 3 is prepared in the rim section 5.

[0015] Furthermore, where the disk cartridge 3 made the front flesh side reverse and is accidentally laid in a stowage 4, when a tray 2 tends to be contained by the case 1, When edge 3c of the disk cartridge 3 projected from the slot 11 for incorrect insertion prevention contacts the heights 10 prepared in the receipt opening 9 of a case 1 and receipt actuation of a tray 2 stops Incorrect insertion of a disk cartridge 3 can be prevented and breakage of the device in a case 1 (illustration abbreviation) etc. can be prevented.

[0016]

[Effect of the Invention] As mentioned above, as explained to the detail, in a disk unit, by using the tray which prepared the stowage with a disk cartridge and the configuration which fits in, this invention prevents laying a disk cartridge in the condition of having mistaken in the stowage, and can prevent breakage of a disk cartridge and equipment. Furthermore, by preparing heights and the slot for incorrect insertion prevention, before a tray is contained in the body of equipment, incorrect insertion of a disk cartridge can be prevented, and failure of an equipment device can be prevented.

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DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] It is the approximate account Fig. showing the example of this invention.

[Drawing 2] It is the background top view of a disk cartridge.

[Drawing 3] It is a sectional view when making the front flesh side of a disk cartridge reverse, and putting on a stowage.

[Description of Notations]

1 Case

2 Tray

3 Disk Cartridge

3a The crevice for a guide

4 Stowage

8 Guide Heights

10 Heights

11 Slot

12 Slot

13 Notching for Fetch

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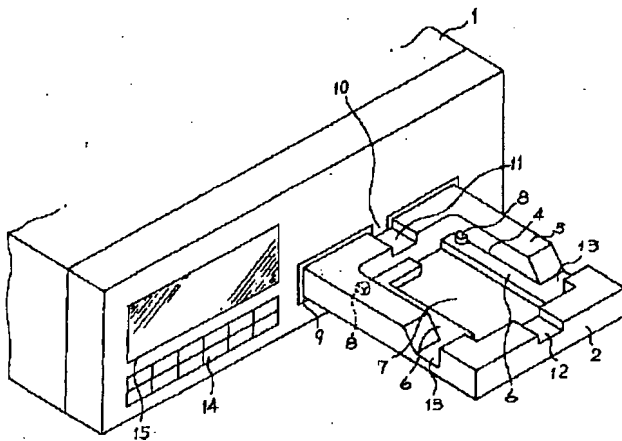
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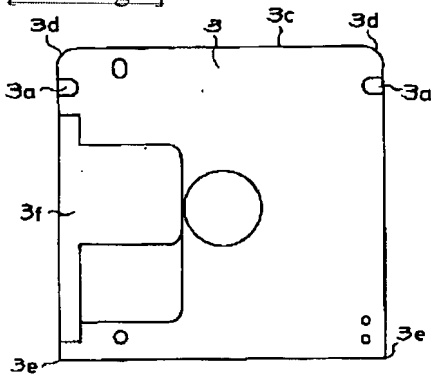
DRAWINGS

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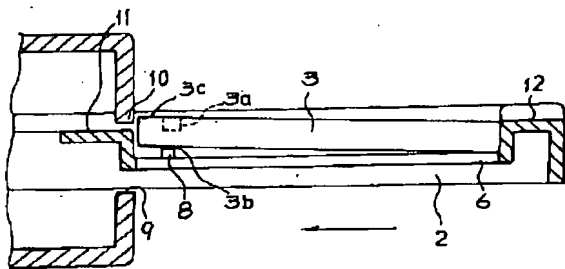
[Drawing 1]



[Drawing 2]



[Drawing 3]



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